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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,261	10/20/2003	David E. Hill	1266.1	2884

7590  
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01/05/2007

EXAMINER

HANDY, DWAYNE K

ART UNIT

PAPER NUMBER

1743

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/05/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/689,261	<b>Applicant(s)</b> HILL ET AL.	
	<b>Examiner</b> Dwayne K. Handy	<b>Art Unit</b> 1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/20/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Majkrzak (3,506,841). Majkrzak teaches a data collecting buoy. The buoy is comprised of a three main sections (11,12 and 13). The lower portion of the main section includes a condenser wall (22 - shown in Figure 4) that includes a compressed graphite felt (24). The power system in the main body includes mercury as a heat transfer fluid (column 3, lines 6-23 and Figure 4). The maximum diameter of main section (12) is surround by a resilient bumper material (element #26, column 3, lines 1-3). The Examiner considers this to meet Applicant's broad limitation of a "stabilizing collar" located proximate to an interface between the upper and lower sections.

### ***Inventorship***

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 1743

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 6-8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Majkrzak (3,506,841) in view of Fleck, Sr. et al. (5,481,904).

Majkrzak teaches every element of claims 8, 10 and 11 except for the detector, the means for introducing and discharging a water sample into and out of the buoy, and the alarm/notification elements. Fleck, Sr. teaches an oil spillage detector. The device is

Art Unit: 1743

best shown in Figures 1 and 2 and described in column 3. The device is comprised of a buoy having a housing (12) with intake and outlet ports (26) connected to tubes (18) for delivering a water sample to a central portion (20) having a gas intake conduit (32). The conduit receives gaseous emissions that are sensed by gas sensor (34). Fleck teaches notification of the detection of oil by various means in column 4, line 40 – column 5, line 32. This passage also includes a teaching of a configuration to give a date and time of the detection. It would have been obvious to one of ordinary skill in the art to combine the detection and notification elements from Fleck, Sr. with the buoy of Majkrzak. One would add the uptake and detector elements from Fleck, Sr. in order to collect samples to test for toxins as in Majkrzak. One would add the notification elements in order to provide notification of the presence of a toxin as in Majkrzak.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Majkrzak (3,506,841) in view of Fleck, Sr. et al. (5,481,904), and further in view of Baxter, Jr. et al. (5,654,692). Majkrzak and Fleck, Sr., as combined above in paragraph, teach every element of claim 9 except for the fluorometer. Baxter, Jr. teaches a tracking buoy. The buoy is best shown in Figure 2. The buoy includes two sensors (34 and 36) comprised of fluorometers for measuring hydrocarbons in the water in the parts-per-billion range when present in the water (column 5, lines 1-10). It would have been obvious to one of ordinary skill in the art to combine the fluorometer from the Baxter, Jr. with the combined device of Majkrzak and Fleck, Jr. One would use the fluorometer from

Art Unit: 1743

Baxter, Jr. in order to detect hydrocarbon pollutants in the part-per-billion range as taught by Baxter, Jr.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Daniels et al., McCoy, Doherty et al., Scholin et al., Siepmann, and Keeping et al. teach aquatic sampling and detecting devices. Cardamone et al. and Tsutsumi et al. teach transmission buoys.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K. Handy whose telephone number is (571)-272-1259. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1743

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DKH  
December 26, 2006

  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700